



# Village of Sauk City

Wisconsin's oldest incorporated Village

05-GF-113  
(5260)

*RSU*

Office of the  
Village Administrator

Municipal and  
Utility Office

January 2, 2003

Mr. Scot Cullen, Chief Electric Engineer  
Public Service Commission  
610 N. Whitney Way  
P.O. Box 7854  
Madison, WI 53707-7854

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PUBLIC SERVICE

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of Sauk City Water & Light's report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Very truly yours,

*Herman Mack*

Herman Mack  
Director of Public Works & Utilities

Enclosures

**TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE  
PREVENTATIVE MAINTENANCE PLAN**

**Sauk City Water & Light**

**FILING DEADLINE  
FEBRUARY 1, 2003**

January 2, 2003

Herman Mack

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Sauk City, WI 53583

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This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

**I Reporting Requirements:** PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

## **II Inspection Schedule and Methods:**

SCHEDULE:	MONTHLY	ANNUAL	EVERY 5 YEARS
Transmission ( $\geq 69\text{Kv}$ )		N/A	X
Substations	N/A	N/A	
Distribution (OH & UG)			X

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

- IR – infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
- RFI - Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
- SI – structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
- Clearance – refers to proper spacing of conductors from other objects, trees and conductors.
- EC – equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

## **III Condition Rating Criteria**

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies .

- Good condition
- Good condition but aging
- Non-critical maintenance required – normally repair within 12 months

- Priority maintenance required – normally repair within 90 days
- Urgent maintenance required – report immediately to the utility and repair normally within 1 week

#### **IV Corrective Action Schedule**

The rating criteria as listed above determine the corrective action schedule.

#### **V Record Keeping**

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

#### **VI Reporting Requirements**

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

#### **VII Inspected Circuits and Facilities**

Circuit # and description	Substation

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation. Emergency generation is test run and maintained every (*type in a period of time not exceeding one month*) to confirm its operational readiness.

## **VIII Scheduling Goals Established and Success of Meeting the Criteria:**

*In 2001 Sauk City Utilities eliminated our old substation because we completed the conversion of voltages from 2400 to 7200. This was a 10 to 15 year conversion because of the cost.*

*Sauk City Utilities does not own a substation, all distribution for the Village comes from the Alliant Energy substation.*

## **IX Facility condition – rating criteria:**

During the past two years 100% of the underground distribution system has been inspected with infrared thermography. During this inspection two elbows and one conductor were found to be breaking down. These items were replaced right away.

There are three overhead circuits, we have inspected one and plan on having the others inspected within the next two years.

We were fortunate enough to have minimal storm damage. During the last year we replaced thousands of feet of underground.